

## XXIX.—SOME INDIAN SPIDERS: THEIR SEASON OF PROSPERITY.

As a class spiders occur throughout the year. There are, however, certain periods when they are at the height of their prosperity. Ecological experience reveals that, in India (especially Western India) the best part of the year for spider collection is during the few months following the rainy season. It is now most of the families of spiders are active and industrious. The scorching summer seems to be a time of distress to them. So also the torrential rains dwindle their number to an appreciable extent by washing away their delicate webs.

There are certain factors that favour the growth of spider population during the period after rainy months and before intense summer.

With a few exceptions spiders are in general moisture-loving creatures. Many of them are arboreal and wholly dependent upon plants for their abode. In India the real 'spring' season is soon after the heavy rains. The vegetation is exuberant during August and September. The increase in vegetation and the recession of destructive rains afford ample facilities for these animals to construct their webs among the plants and peacefully propagate their species. Food also is in plenty during this season. Attracted by the numerous wild flowers which appear now, insects like bees, and flies come to the plants in large numbers and get easily entrapped in the spiders' webs.

The following are some of the common families of spiders which prosper during the season referred to.

Among the arboreal groups of spiders the most important family that flourishes during the months of September and October is that of the Argyropidae. Attached to the boughs and branches of trees the giant wood spiders (*Nephila maculata*) are busily engaged in constructing their extensive snares. Along fences and thickets the beautiful *Argyope* thrives. Wherever there is vegetation the garden spiders (*Epeira diadema*) are present in hundreds, very active building their delicate webs. Walking along an open country side, during evening time, a collector can see numerous members of *Argyroperians*, *Araneus*, *Tetragnatha* and other Argyropids carrying on their web construction in full swing. These spiders remain a feature of every country part throughout the cold season. With the approach of summer, however, when the atmosphere is no longer hygroscopic but dry and the annual vegetative growths parched, the Argyropid community also dwindle little by little and confine themselves to the 'greens' by the margins of pools, tanks and rivers or other moist localities.

Oxyopidae, which generally live among grass and other small plants, increase and decrease in population with the growth of such plants after the rains and their drying away in summer. During summer many Oxyopids shift themselves to the watered fields of rice and other cultivation. A great number of them is however destroyed during the summer harvest. May, June and July are months of famine for them. Only with the onset of

the following monsoon and the reappearance of grass in the lawns do they revive.

Closely allied to the Oxyopids in their habits are the Psechrids. They can be easily distinguished from the former by their difference in shape, the extraordinary length of the anterior two pairs of legs, and the absence of spines on the body. With the increase of grass and other plant growths during monsoon and after, these spiders also multiply and spend their days among axils of leaves or spikes of grasses. They are extremely common among the inflorescence of Cyperaceae and Amaranthaceae. Just as the Oxyopids they also decrease in number with the withering away of vegetation and resort to the scanty flora in damp localities during summer.

Of Sparassidae and Clubionidae, the former seems to have more liking for moist conditions than the latter. Sparassids like *Palystes* and *Sparassus* are very fond of broad and succulent leaves for the construction of their patch like webs. During the monsoon, and prior to the advance of sultry weather and the consequent dwindling down of wild plants, they thrive in large numbers everywhere. In summer, however, there is marked decrease in their number, and they are only found on the leaves of watered garden plants like Cucurbita, Water-melons, Plantain suckers, etc.

The Clubionids also present seasonal variation and the members found in the monsoon time are healthier and larger than the summer brood. From the fact that many Clubionids reside among green leaves there is reason to believe that they have a liking for moisture.

Herselids also seem to thrive better under moist conditions rather than in the height of summer. During the months of August and September we find plenty of them on the bark of trees—trees with fissured bark like *Pithecolobium saman*, mango trees, etc. During the hot season their number shows a definite reduction. There are however certain species which are found on old dry walls and which thrive equally well both in summer and in winter.

Pholcids, tender, long-legged spiders found in the roofs and rafters of old houses do not seem to be affected by seasonal variation.

Many Attids or jumping spiders also prosper unaffected by change of season; but those species which hunt among vegetation are affected in a similar way as the Oxyopids and Psechrids.

With a few exceptions the entire group of Lycosids require moisture for thriving. Shortly after the rains they are abundant among the low-lying, water-logged parts of any compound. They always like cool places and therefore they distribute themselves in damp and moist localities, beside water, among putrefying dead leaves and rubbish on open grounds, under stones and in damp soil. In moist fields, laid fallow, their number is enormous. During winter mornings, thousands of their patch webs can be seen on open lawns, and the members themselves running here and there with great agility. With the advent of summer they diminish in prosperity and get confined to moist areas beside fields and pools.

Eresids seem to be common during winter and summer alike.

The webs of the Indian colonial Eresids—*Stegodyphus*—are found to remain intact for more than two years and the members are active throughout the period.

Although spiders, as a group, are described as ubiquitous, Nature has her own influence upon their community. Spiders withstand climatic and seasonal variations to a greater extent than many other lower animals. They persist through Spring, Summer, Autumn and Winter; but it needs be mentioned that moist conditions are preferred by most of them.

More careful and perseverant field work will surely reveal more facts about the 'life of spiders'. The 'breeding time' of spiders is also an interesting subject for further exploration.

BOMBAY,

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### XXX.—THEFT OF A WATCH BY A FIDDLER CRAB.

This is a story told by an Ajman Badawin to Lt.-Col. H. R. P. Dickson on 25-6-40 of the wonderful tracking powers of all members of the Murra tribe, and in the presence of one Muhammad al Murri.

Muhammad al Murri, before he came along to the K. O. C. guards hut at Burgan, had been staying with Sheikh Sabah al Nasir as *subah* at his camp at Mungaf near the sea shore. One day Sheikh Sabah's motor driver complained that his wrist watch had been stolen from him while he was having a bathe. He explained how that the tide was going out when he went down, and he undressed and put his clothes on the sand and his wrist watch with them, and went into the sea. He had not noticed anyone come along the shore although he had not paid much attention. When he came out and got dressed he found his watch had completely disappeared and there was no sign of it anywhere.

Muhammad al Murri was present in the tent and heard the story. The driver did not ask him to find it for him or say anything to him.

Shortly afterwards, the Murri, being rather interested, walked down to the shore. The tide was now lower, but quite easily he found the place where the clothes had been put on the sand, and around which, and to and from it, down to the water were the driver's foot marks. After wandering about for a bit he could see no trace of any other human being having been near, the only marks there were, were those of crabs which had been running about on the sand along the shore. One track which he noticed, came towards where the clothes had lain, but he did not think anything of this, and came to the conclusion that the driver was a liar, and had himself lost his watch on some previous occasion. The Murri then returned to camp.

Next morning however, he again went down to the same spot. This time the tide was high, and all marks had gone. He sat